An Essay on Hepatitis,

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W. P. H
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By

Thomas W. Meriwether

of Virginia.

1823.

An Essay &c.

By the term Hepatitis is usually understood an inflammation of the liver, which is divided into the acute and chronic states. It is not my intention, however, to confine my remarks to the strictly inflammatory condition of that organ, but also to treat of the no less common form of its diseases termed by Dr James Johnson, "hepatic derangements." This truly classical author, after refuting the opinion that hepatitis is unknown in Jamaica, very justly remarks, "many people indeed can not be persuaded that the hepatic functions are atall deranged, unless hepatitis in propria forma be present." & then asks "is the stomach never disordered except in gastritis?" This laconic question seems to me conclusive, even though the analogy between the functions and

diseases of the two viscera may not be entirely strict. The stomach appears to me to be less frequently affected with inflammation & to have a smaller proportion of its disorders dependant on this cause, but the difference is certainly not such as to preclude all argument from one to the other.

As acute hepatitis is rarely the consequence of other forms of the disease, and as it is usually the commencement of the long train of complaints hereafter to be mentioned, it claims our first attention. Its symptoms in different climates are infinitely varied, but my description shall be confined to such as I have witnessed, or those that are mentioned as occurring within the temperate zones.

A violent attack of this disease rarely comes on without some previous symptoms, which to an experienced eye would indicate the approaching danger. The most common perhaps of these, as may be ascertained by subsequent inquiries of the patient, is a disordered state of the alimentary canal. The cause of this, seems to be a deficiency or vitiation of the bile, which like all other secretions must be suppressed, or greatly al-

tered by the incipient inflammation of its peculiar gland. The altered condition of the bowels generally consists in costiveness, from the want of their accustomed stimulus, & in the faces assuming a clayey consistency, & also an ash colour. This last is not uniform but is of different hues at every evacuation, this being perhaps the most frequent. The former appearance invariably attends an absence of bile, & is very apt to deceive a person not accustomed to such observations — their smoothness & homogeneousness being considered an evidence of complete digestion. The stomach is necessarily affected by such a state of the bowels, & the sympathy of the head is often evinced by a fulness of dull pain, & sometimes by an excruciating headache. Besides these more evident symptoms there sometimes occur occasional severe, but short attacks of pain about the region of the liver. The pain is sometimes higher up towards the axilla & not unfrequently there is an uneasiness or pain at the lower angle of the scapula, or on the very top of the shoulder. After some or all of these premonitory

circumstances, the disease comes on with all its force. The violence of its first attack bears no small resemblance to pleurisy: the same difficulty of breathing, attended by a violent stitch in the side on taking too deep an inspiration. The pulse too if not oppressed, is very active & the power of motion is for a time, almost suspended. The stomach is more frequently affected with nausea & there are sometimes symptoms of colic; but on the whole the diagnosis between pleurisy & the first stage of this disease, in its most violent form, is what I can hardly embody in a description. I am the less solicitous however on this head as the management of each must for the first few hours consist of nearly the same remedies. These though necessarily very powerful, may be soon enumerated, & first, (as it deserves to be) ~~we~~ may be mentioned blood-letting. The propriety of this must first be decided on, & I will venture to say that if the disease presented, be genuine acute hepatitis, not only the propriety but the necessity of this first step, will very soon be evident to every practitioner who is guided by the symptoms before him. Indeed this fact is so well established, that the blindest devotee of nosology would scarcely be

in danger of neglecting it in this disease, when once ascertained. Much depends however on the manner of performing this simple operation. In all cases (except of great congestion, and where blood should be taken in small repeated quantities, after the Riverian method,) the orifice should be large, & the desired quantity of blood taken, in the least possible time. The advantage of this mode is so universally acknowledged, especially where it is important to spare the patients blood, that 'tis needless to expatiate on the subject. Very little is to be expected from bloodletting in violent cases, without employing it liberally, but at the same time judiciously. Next to bleeding & peculiarly similar to it in its effect on the disease, is purging. This, besides its usual antiphlogistic effect, is literally a sort of topical depletion to the hepatic system. In order to have the full effect of this mode of treatment, the ordinary purgatives should be combined with calomel, which undoubtedly has a peculiarly happy effect in emulging the ducts, & regulating the circulation of the liver. The aggrava-

tion of the inflammatory symptoms occasioned by the mercurial fever, may generally be avoided by using it in large doses, not too frequently repeated, and keeping up sufficient action on the bowels & skin, together with all the other branches of the antiphlogistic treatment. The excellent effects of purgatives in this disease, & the comparative caution with which they must be used in Pleuritis, I conceive to be one of the most striking differences in their treatment.

I have endeavoured above to describe acute hepatitis as it ordinarily occurs, but from this there are some variations. The one that I have most frequently observed, is the combination of these symptoms with those of bilious colic, in such a manner as might deceive the inexperienced as to the true nature of the disease. In such cases (as also in the genuine bilious colic) it has long been the practice of my preceptor (after bleeding, if necessary,) to give large doses of calomel, in combination with opium, about 20 to 3 grs of the one to a scruple of the other, made into small pills. This is truly a happy union, and their action & cooperation are readily understood, when we consider the

indications to be fulfilled. The pain is allayed, the stomach composed, & the spasm relieved, by the opium, & a thorough operation on the alimentary canal is procured by the calomel, & they would both often be thrown off the stomach, unless made into small pills. This latter expedient is recommended by Dr. Darwin, & is by no means unimportant. As to the combination of these two medicines, it may be done with a great variety of intentions, & is very much used by our latest & most approved authors, as Armstrong, Johnson &c.

There is another variety in the form & symptoms of Hepatitis, which has forcibly attracted my attention, i.e. its combination with Erysipelas. An important case of this sort occurred to me last summer, which I shall now endeavour to relate from memory: this treacherous faculty however has no doubt let slip many circumstances that should have been recorded, and I shall ever have to regret that even the cases I have already witnessed, have not been entrusted to a more faithful tablet.

Case of Hepatitis combined with Erysipelas.

Mrs. E. M. 54 years of age, of the sanguineo-nervous temperament, of ordinary stature, & corpulent, but never of robust constitution. For many years of the early & middle part of her life, her health was very delicate, and frequently interrupted by violent attacks of bilious fever. About the 35th year of her age, her constitution seemed to take a turn, from being very spare she became quite corpulent, & since about that time, has never had the bilious fever, but apparently in its stead has had occasional attacks of erysipelas. It always attacked the face, affecting especially the cheeks, & eyelids, and though generally so violent as to occasion a total closure of the eyes, yet it went off in a few days, with very simple treatment. After having given some general idea of the patient's constitution, I will now endeavour to relate the more immediate circumstances of the case. Last winter, her health was very delicate, so as to confine her generally to the house, and make her still more particular in diet, which for years past, has consisted principally of milk & vegetables. Among other-

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symptoms of bad health, may be mentioned (as was afterwards learned,) a clayish consistency, & light colour of the passages, and (the almost necessary consequence of this last symptom) indescribable bad feelings. About the middle of June, without any evident exciting cause, one of her eyes was attacked with erysipelas. I advised her to be immediately bled &c. But the terror of the lancet prevented the use of that, till it should be absolutely necessary & as for the other remedies such as emetics, leeches &c, they seemed to her too harsh, as she had so often before recovered by the use of the simplest means — low diet, & perhaps a little salts. This course was continued for several days, & with an apparently good effect, so that the attack seemed to be going off as formerly. But about five days after first indisposition, the apparent amendment was reversed, & a relapse was evident from inflammation of the eyes, flushing of the face, pains in the back & limbs, & general fever. The symptoms now becoming of a more serious character, I insisted on her being bled, & accordingly the attempt was made, but from the indistinctness of the vein & the dimness of the

(candle) light no blood was obtained. Her agitation was so great, that, contrary to any better judgment, nothing more was done till morning, when the urgency of the case increasing, she was bled in the hand about twelve ounces, & took ten grains of Calomel. Five or six hours afterwards, the inflammation & swelling in her face increasing, and the throbbing of the carotids, & also in the eyes, being considerable, (the pulse of course quite active) I bled her till the pulse was considerably weakened, & immediately after the operation, complete syncope took place. After recovering from this, the medicine operated & she felt considerably relieved, but late at night the tension and pain about the face were very distressing: then for the first time was used & with great advantage, a remedy which I exceedingly regretted not having sooner i.e. leeches.† The case however still continued

† I need not dwell on the importance of these in numerous cases, for it is so well known even among the poets, that they have designated the followers of our profession by the name of this <u>surgical</u> reptile. To obtain their

a serious one, fevers alternating with chills, throbbing headache, & the face so much swelled as perfectly to close the eyes, which, as long as they could be seen, looked very much inflamed, especially the aenata.

The abovementioned ten grains of calomel, I had prescribed partly on the authority of Dr Armstrong, (whose treatise on erysipelas I admire exceedingly,) but of its farther use I was not aware, till my preceptor saw the patient about two days after the relapse, when he prescribed the following powder; ℞. Calomel 14 grns, James's powder 3, Opium ¼th & Pref: Chalk 5. The effect of this was admirable, it equalized the temperature, composed the nervous irritability, & agitation, and after 2 or 3 repetitions of it, in the course of 24 hours, acted on the bowels very effectually. After this, light tonics were exhibited, such as chamomile tea, sometimes combined with Rhubarb. But

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full benefit, & indeed to avoid bringing them into discredit, they must be largely employed, not as by a certain physician among us, (lately, of great name,) who, a lady informed me, prescribed for an acute pain in her chest, the application of a single leech.

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the medicine which was principally relied on, & with the persevering use of which, the cure seemed to keep pace, was a small pill much used by my preceptor containing 1 grain of Calomel, ¼th of Opium & ⅙th of Tart: Emet. Whenever it was omitted for several days, she was frequently oppressed with an overpowering sense of weakness continuing for half an hour, or an hour at a time, attended with coldness & clammyness of the surface, & with an almost imperceptible pulse. At these times the passages were invariably light coloured, & clayey, and the only way in which I can account for the almost tonic effect of these pills, is, that by restoring a healthy secretion of bile, they invigorated the alimentary canal, & hence, sympathetically, the general system.

Having thus endeavoured to state every thing interesting in this case, I am now more sensible of the merit of Sydenham & Cullen in their concise but comprehensive & accurate descriptions of disease. Yet I might venture to hope for indulgence when it is understood that filial affection fixed my attention to every stage

of the disease & magnified every symptom in my view.

The chronic form of this disease is much more common, than what has hitherto been treated of. though it is generally consequent on a violent attack at the commencement. This is what is commonly called the liver complaint, & its marks are often carried in the external appearance with a degree of distinctness which may be compared to "letters on the forehead." The skin has neither the paleness of ordinary debility, nor the hectic glow, but a sallow, thickened & smooth or as Dr. Darwin says "bombycine appearance, & the countenance has usually a melancholy, dejected look, rarely occurring to the same degree in other diseases. On more particular inquiry, we almost invariably find, that even though there may be no pain in the side, yet there is a tenderness on pressure about the epigastric & right hypochondriac regions, & on careful examination, an enlargement of the liver may often be discovered. Another symptom which is very constant is a pain in various degrees, in some part of the shoulder, mostly about the lower angle of the scapula & occasionally even in some part

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of the arm. The patient too sometimes assumes a half bent position, complaining of considerable pain on either straightening himself, or bending still further: — This experiment is worth attending to in the dignostics.

The tongue is foul, with brown fur, especially towards the back part: & there are sometimes two foul streaks along the tongue, when the middle & edges are clear. This in fevers is considered a favourable symptom, being the manner in which the cleaning commences, but I am told that in this complaint it is a sigth of its great inveteracy.

The bowels can scarcely be in a natural condition, & attention to this circumstance is extremely important in the diagnosis & treatment. The evacuations are generally, as before observed, clayish, & when of this description, are sometimes not so irregular as to attract notice. They are often very hard and unfrequent. but tis also not uncommon, to meet with an irritated, griped state of the bowels, attended with occasional diarrhœa. The colic too is in these cases often produced by the slightest impropriety in diet. The appetite is also variable, but generally

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requires too much for the proper performance of the digestive functions, of which the patient is often reminded by an unusual & disagreeable sense of fulness, after eating even a moderate meal. Besides these symptoms some others occur in long protracted cases, very distressing to the patient & perplexing to the practitioner, but which would be too tedious for description here. One however, from its preeminent importance should not be omitted: indeed it so forcibly attracts the attention that when it occurs, the disease assumes a new name. I allude to Dropsy, especially Ascites, the frequent dependence of which on hepatic disease, must be acknowledged. It also sometimes happens, that the continued sympathetic irritation of the lungs, occasions their suppuration & then the patient is destroyed by hectic. This melancholy termination I have witnessed in several cases of singular obstinacy.

The treatment of chronic hepatitis is much more easily laid down in a general way, than put into effect in every necessary particular of Regimen & Medicine. The article which of all in the

materia medica has the highest claim & is the most generally used in this disease, is Mercury. It has been exhibited in every variety of form, & with different & even contradictory views of its modus operandi. Employed in any way by which its specific effect may be obtained, I should suppose its action must be beneficial; but the peculiarities of its operation under the various modes of administration, are by no means equally adapted to every case. When introduced into the system by inunction, its effect is more gradual & mild & much less distressing to the stomach & bowels, which in some cases is of such primary importance, as to give this method a decided preference; & though not generally to be relied on alone, yet there are few if any cases, where it is not a useful auxiliary. The next mildest preparation is the blue pill, which, together with the ointment is all sufficient, where as in Syphilis the only object is salivation. Another & quite a contrary mode, has been highly recommended by the late writers on tropical climates, which is a repetition of scruple doses of calomel, till the desired effect is pro-

duced. such a course might be necessary in the gigan-
tic diseases with which they had to contend, & may some
times be resorted to with advantage, by practitioners
in our climate. The effect of such doses is indeed al-
most incredible to those who have only used this me-
dicine in the old way, & I acknowledge that with all
the preparation of lectures & reading on the subject,
I was not a little surprised to hear a patient who
had taken a full scruple, say, that "the physick
hardly worked her at all & she reckoned she certainly
did not lick the spoon clean." Notwithstanding how-
ever, what may be said in favour of this, & other
modes of administering this remedy, I think its good
effects greatly increased, & much more certain, when
given in small doses, combined with opium, & if
the stomach will bear it, antimony. The above-
mentioned pill containing 1gm. of calomel ¼th of Opium
& ⅙th of Tart: Emetic is the composition that I have seen
most used, & it seems to me that 2 or 3 of these every
24 hours taken at such periods as least to interfere
with digestion, unite more of mildness, expedition,
& certainty than any other single course, at the

same time that their effect on the bowels is admirable. It is often however of advantage to precede their use, by a common mercurial cathartic & follow them up when they first affect the mouth by a dose of castor oil.

Bleeding too in the commencement is often of great service, though the disease is chronic, & not so much for what it alone could do, as that it prepares the system for the subsequent treatment. Even after the mouth is made sore, it is generally necessary to continue an occasional use of these pills for some time: & also when the patient is very much debilitated, whether from the disease, or former courses of treatment, the use of mild & aperient tonics is proper. A tea of chamomile & rhubarb has a very good effect, but the best is the water of the sulphur springs, the powers of which when properly used are astonishing. I do not mean that to this alone any serious case of the disease should ever be confided, nor indeed to any other medicines, whatever, to the exclusion of mercury, but after a proper course of this heroic medicine, something else is necessary to keep the bowels gently open,

the skin soft & perspirable, & at the same time to have a slightly tonic effect. These indications & many others, necessarily implied, such as the maintenance of the cutaneo-hepatic sympathy, the balance of the circulation, &c are most admirably fulfilled by the White Sulphur water, the action of which is peculiarly happy after a mercurial course.

Some persons, I know, place very little reliance on any natural mineral waters, but the accumulated evidence in favour of these, ought, I should think, to satisfy any unprejudiced mind that they are immensely valuable — more especially, as they are peculiarly adapted to cases where their effects can not be substituted or imitated. The benefit derived from their ordinary use, is, necessarily very much circumscribed, by the empirical manner in which they are presented, by every patient for his own case. The injury, or rather the abused good, arising from this circumstance, is perhaps greater at the Virginia springs, than at any others, on account of the numerous varieties of differently impregnated waters. But never did exception more strongly confirm a general rule — for what

more than a negative injury, could arise from the use of the waters, if inert? I should be happy to have it in my power to contribute to their more systematic employment, but as I have never visited them, nor seen any accurate analysis of their waters, my effort would probably be fruitless, perhaps presumptuous. I will only mention, that my first allusion was to the Salt Sulphur, as well as the white, both being peculiarly adapted to this disease, & well deserving Dr Chapman's recommendation in his lectures — that after all the usual remedies have failed, the patient may still have some hope from the Sulphur Springs in Virginia.

A great deal has lately been said, of the Nitro-Muriatic acid-bath, as an extremely valuable remedy in this disease, & even as a substitute for mercury. I am sorry to say that I have never seen it fairly tried, but at the same time I do acknowledge that my faith in it has been very much weakened by what is stated on the subject, in Scudamore's treatise on gout.

The slighter hepatic derangements which do

not even amount to chronic hepatitis, are very common. They necessarily precede & follow (though for irregular periods of time) all attacks of a higher grade, & in the former case, often consist principally, in a congestion or engorgement. They also frequently occur, in constitutions otherwise healthy, & wear off without permanent injury, except so far as each repetition of derangement, may contribute to the formation of a habit. In these cases, much may be done, by proper diet & regimen, & thus many of them never come under a physicians care. But this advantage is often abused, so that many times when such symptoms occur in a degree that indicates strong predisposition to acute hepatitis, they conclude that they are only bilious, & that all will be well in a day or two, if they will only take care of themselves & have patience: and thus they wait, either taking no medicine at all, or, what is worse, improper ones, till, when the physician is called, the disease has made such progress, that we may almost be said to contend with death itself.

As a specimen of considerable hepatic derangement, strongly tending, & nearly approaching to hepatitis itself, I will relate the following case, which particular reasons, of a private nature, induced me to write down when it occurred.

Mr. T. H. accustomed to an active life on a farm, has been unwell for some 10 or 12 days, but first applied for advice this evening, May 28th. 1823. He has generally been healthy, except two attacks within the last ten years, which from his description, were bilious. His present attack came on with first a headache, owing probably to a costive habit, which he had been in for some time, then a pain in his breast, with a troublesome dry cough. Dr. R. gave him, at this stage two doses of pills, which operated well — bringing away a good deal of bile & occasioning at last griping & mucous stools. They made him feel rather better about the head, but more especially relieved him of a fulness about the precordia. He afterwards, of his own accord, blistered his wrists (which, he says, in a former attack relieved him, after one on the breast had failed,) with some advantage. He was bled on the 26th. with some relief

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but today his pains & bad feelings have been worse than ever; &, in addition to his former symptoms, he has a pain in the right side constantly perceptible, but occasionally on any sudden motion, very violent: & that hypochondrium about the lower edge of the liver, is tender to the touch. There is pain in the back of his neck, as well as over his eyes. His pulse is confined, labouring, & somewhat thrilling, tongue furred with brown, eyes reddish, & hands cool. I bled him about ℥ x, & gave him pills containing calomel & jalap a.a. 12gr. to be taken tonight, some pills of calomel, opium & tart: emetic, to be taken, one tomorrow night, & the next day one at morning, noon, & night, followed by a dose of castor oil the next morning — this course, if necessary, to be repeated. Also febrifuge powders to be used three a day, & cough mixture to relieve the cough, especially through the night. A blister to be applied to his side tonight. Diet, mush & milk which he is very fond of; & molasses with bread or mush. Pulse much altered by the bleeding — now large & soft (though there is still some thrill perceptible) and his hands became warm & moist. The

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blood had very little buff. Thus far is all that I wrote on the case, as he required no farther prescription, & recovered in a few days. This case I thought would be of some interest, as illustrating the advantage of prompt & decisive measures, before the disease has reached its height.

In all the various forms of these diseases, the remedy on which my chief reliance should always be placed, is the combination of opium, calomel, & tartar emetic, abovementioned & a very good rule for its use, in mild cases, is to take a pill every night, or oftener, till the passages assume a natural appearance, & then to discontinue them as long as this sign is observed.

Where the biliary derangement consists only in a deficiency, & is evinced principally by a costive habit, I can speak in terms of the greatest confidence of a remedy recommended by Dr Physick which is simply — Rhubarb. His mode of using it is as follows. Let it be made into pills of ordinary size without any admixture whatever but merely warm water & let the patient take every other night

on going to bed, 4 or 5 of these or as many as he may find necessary to procure barely, a natural openness of the bowels, & if this course is kept up regularly & perseveringly, for months if necessary, the patients highest expectations will not be disappointed. It never occasions any disturbance of the digestive functions, unless there should be impropriety in the diet, & the length of time that it may be adviseable to use it is a matter of no consideration, as the frequency or continuance of its employment does not, as with most other medicines, render it necessary to increase the dose.

Of hepatic derangements & diseases, in general I will only further remark, that however various their symptoms may be, there is still one guide almost unerring to direct us at least in the diagnosis, & in judging of the effects of our remedies, that is, the regular & attentive observation of the alvine evacuations. To this point my attention has been most particularly directed by my preceptor, from the commence-

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ment of any studies, & I have often had occasion to seek its aid & acknowledge its importance. From the number of other symptoms however to which we are directed to attend, I am persuaded that no person without having felt the frequent insufficiency of the others, can be aware of the due weight of this — especially in these diseases. I am pleased to find my former instructions & opinions confirmed by Dr Faithorne whose admirable treatise on this disease, I am sorry not to have had an opportunity of reading until a short time since. There is one paragraph in his work at the conclusion of his treatment of chronic hepatitis which very forcibly caught my attention & which I will here introduce in confirmation of my own opinions. "By assiduously following these arrangements, the first stage of chronic hepatitis may generally be remedied, & the nicety lies more in finding out the true disorder, than in the actual treatment at this period which can only be done, we can not too often repeat, by a careful inspection of the excretions: for the symptoms whether of the stomach, bowels, head, or chest, are all equivocal

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and may arise from a different cause than mere hepatic sympathy. Hence, the latter can only be ascertained, by a careful examination of the part or organ which tells more in the advanced, than in the first stage of the disorder, or from the examination of the alvine contents, which is at all times the truest evidence, & thus we are again reduced as our certain criterion of information to that observance of the secretions so often recommended, the importance of which, has never before been extensively surveyed, or accurately investigated.

Many other quotations from this excellent work, might be very appropriately introduced in support of what has been here advanced, and I acknowledge that it afforded me considerable satisfaction on my first perusal of it after the composition of the principal part of this essay, to find so many coincidences between them. The object of this essay however not being to enlarge, or simplify the present stock of medical knowledge, but merely to give a specimen of my own understanding of medical subjects, I have not pur-

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posely examined the opinions of any author, but have endeavoured to describe in a practical manner, the plan of treating this disease, which the result of my present limited & theoretical information, without much experience, would lead me to adopt.

My apology for its not being more comprehensive & correct, I can not better express than in these few borrowed lines

Ocean's lone caves I would not roam,
In pearly grandeur decked,
Its bosomd treasures from their home,
All glittering to select,
Nor stray to mines of richer ore,
Since from my own, you ask
Its native gems.